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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,842	08/09/2000	Guglielmo Biagiotti	5294	3763

7590

07/16/2003

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EXAMINER

PIAZZA CORCORAN, GLADYS JOSEFINA

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 07/16/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/601,842	BIAGIOTTI, GUGLIELMO	
Examiner	Art Unit	
Gladys J Piazza Corcoran	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2003.
- 2a) ☒ This action is **FINAL**.
- 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-56,58-64,67-75,77-82,84,86 and 88-100 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 92,93 and 95-98 is/are allowed.
- 6) ☒ Claim(s) 50-54,56,58,62-64,67-75,77-82,84,86,88-91,94,99 and 100 is/are rejected.
- 7) ☒ Claim(s) 55 and 59-61 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some \* c) ☐ None of:
    - 1. ☐ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**FINAL ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 99 and 100 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 99 recites that one of the first or second layers is embossed according to the background pattern between a pair of rollers of a first embossing unit and then the second layer is embossed between a further embossing cylinder and a pressure roller for generating the background pattern on the second layer. There is no support in the specification for embossing the second layer with a background pattern between a first embossing unit and then later passing the second layer between a further embossing cylinder and a pressure roller for generating the background pattern. It is suggested to amend claim 99 to read, --wherein said first layer is embossed--..

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 68, 82, 94, 99, 100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 94 recites the limitation "said third set" in lines 3 and 6. There is insufficient antecedent basis for this limitation in the claim. It is suggested to either cancel this claim, define the third set in this claim, or depend this claim upon a claim that defines the third set. It is noted that claim 98 already recites the same limitations as claim 94 yet is dependent upon claim 93 which defines the third set.
6. Claim 99 recites the limitation "the second" in line 26. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to --the second layer--.
7. Claim 99 is unclear by reciting that one of the first or second layers is embossed according to the background pattern between a pair of rollers of a first embossing unit and then the second layer is embossed between a further embossing cylinder and a pressure roller for generating the background pattern on the second layer. It is unclear how the second layer can be embossed with the background pattern twice. It is suggested to amend line 30 of claim 99 to read, --wherein said first layer is embossed--.
8. Claim 68 is unclear by reciting "a first embossing cylinder" in line 5. Claim 68 is dependent upon claim 67 which already defines a first embossing cylinder, therefore it is unclear whether Applicant in claim 68 is referring to the embossing cylinder of claim 67 or another embossing cylinder. It is suggested to amend claim 68, line 5 to recite, "said first embossing cylinder."
9. Claim 99 recites the limitations "said first embossing cylinder" in line 39-40 and "said second embossing cylinder" in line 40. There is insufficient antecedent basis for these limitations in the claim. It is suggested to amend claim 99, line 27 to recite --a first

embossing cylinder-- in order to provide antecedent basis; then recite --said first embossing cylinder in line 33 --said first embossing cylinder-- and in lines 35 and 36 --a second embossing cylinder--.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 50, 51, 54, 56 (based on 54), 63, 64, 67, 70, 71, 72 (based on 54), 78, 79, 84, 89, 90, 91 are rejected under 35 U.S.C. 102(b) as being anticipated by Murphy et al. (US Patent No. 3,672,950) as set forth in paragraph 17 of the Prior Office Action, paper number 10.

Applicant newly amended claim 50 to recite that the second set of proturbances are higher than the first set of proturbances and that the first and second sets of proturbances protrude from a common face of the said first layer. If the first web is considered to be web 9, web 9 is first embossed between embossing rolls 19 and 18 where 19 has projections that form proturbances in web 9. Then the web 9 is embossed between roll 30 and roll 28 where roll 30 has a raised patterned impression mat 31 that forms proturbances in web 9 from the same surface as roll 19, therefore the first and second sets of proturbances protrude from a common face of said first layer. As to the second set of proturbances being higher than the first set of proturbances, Murphy discloses the projections on roll 19 has a height of 0.030 inch (column 7, line 5)

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while the raised patterned impressions on mat 31 on the roll 30 corresponds to the surfaces of mat 27 on roll 24 (column 6, lines 13-15; column 7, lines 33-34) which have a height of 0.045 inch (column 7, lines 20-21), thus the second set of protuberances are higher than the first set.

Murphy discloses a method of producing an embossed sheet material of two layers of web material joined together by embossing a first layer of web material (web 9), previously provided with a background pattern made up of a first set of protuberances (protuberances 35 formed by embossing rolls 18,19), generating a second set of protuberances on the first layer (web 9 is embossed when passed through second pattern roll 30 and impression roll 28) which are partially superimposed on the background pattern and define an ornamental motif made of a pattern of major dimensions (the second pattern is of a higher depth, .045in than the first pattern .030in, column 7, lines 5-21) and minor density (see figures) with respect to the background pattern, coupling by means of adhesive the first layer with a second layer of web material (web 10), the adhesive is applied in areas corresponding to at least some protuberances of said second set of protuberances and the sheet material is substantially free of adhesive in correspondence with the first protuberances of the background pattern (the adhesive is only applied according to the pattern of the second set of protuberances on roll 27 and the rolls 28 and 30 apply pressure in the same pattern as the adhesive is applied) (column 5, line 37 to column 6, line 23).

As to claim 51, the background pattern on the first layer of web material is provided by embossing in line and before the embossing of the first layer for generating

the ornamental motif (column 5, lines 38-75). As to claim 54, the first set of protuberances (35) on the first layer (10) is generated by running the first layer around a first pressure roller interacting with a first embossing cylinder having a first set of points (rolls 18, 19 and pattern of projections engraved on the roll 19) and the second set of protuberances generated by running the first layer around a second embossing cylinder with a second set of points (pattern roll 30 with raised surface) where the second set of points is of larger dimensions and lower density than the first set of points (column 7, lines 5-21). As to claim 56, it can be considered that the pattern roll 30 interacting with roll 28 forms the third set of protuberances on the second layer (10) therefore the second embossing cylinder (30) interacts with a second pressure roller (28) to generate a third set of proturbances on said second layer (10). As to claims 63 and 64, the second layer of web material (10) is provided with a background pattern made of a set of protuberances by embossing in-line and before coupling with the first layer (9) (see figure 2, pattern 35 embossed by rolls 12, 13). As to claims 67, 79, 84 the first and second layers are separately embossed by embossing units (rolls 12, 13) and (rolls 18, 19) and then run around an embossing cylinder with points for generating the ornamental motif on the first layer and for joining the first and second layer (rolls 28 and 30). As to claims 70-72, adhesive is applied to the protuberances of the third set on the second layer (with roll 24) and the first and second layers are adhered and joined together with the protuberances in the third set in correspondence with the second set (column 6, lines 1-23). As to claim 78, the proturbances of the background pattern (formed by projections on roll 19) on the first layer (9) and the proturbances of the

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ornamental motif (formed by the patterned impression mat 31) on the first layer (9) project toward the second layer (10) with the proturbances of the background pattern (formed by projections on roll 12) on the second layer (10) project toward the first layer (9) (see figures). As to claim 89, the second layer (10) is embossed for generating a third set of proturbances (those formed by rolls 24 and 28 on web 10) and having the same density as the proturbances of the second set (those formed by rolls 30 and 28 on web 9) (the pattern is corresponding, column 6, lines 10-15) and are inserted inside one another (see figure 2, the patterns are impressed onto the "right" side of the webs thus they must be inserted inside one another), and the adhesive is applied to a top surface of at least some of the proturbances of the third set of proturbances (the third set of proturbances are the ones formed by rolls 24 and 28 on web 10 which also provide adhesive to the webs). As to claim 90, the background pattern on the first layer of web material is provided by embossing in line and before the embossing of the first layer for generating the ornamental motif (column 5, lines 38-75). As to claim 91, the first set of proturbances are generated on said first layer (9) by a first embossing cylinder (rolls 18 and 19), said third set of proturbances are generated on said second layer (10) by a second embossing cylinder (rolls 24 and 28) and said adhesive is applied thereon, while said second layer (10) is in contact with said second embossing cylinder (adhesive is applied on the web while between rolls 24 and 28), and said second set of proturbances are generated by laminating said first layer (9) and said second layer (10) on said second embossing cylinder (between rolls 30 and 28 where roll 28 is considered to be the second embossing cylinder).



***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 58 (based on 54), 73, 75 (based on 54) are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. (US Patent No. 3,672,950) in view of Ruppel et al. (US Patent 5,173,351) and/or Barnholtz (WO 97/44528).

Murphy is applied as discussed above in paragraph 11.

It is considered well known in the art of embossing paper to emboss one layer with a greater embossing depth than the second layer joined to it. For example, Ruppel discloses that it is known to provide differing depths in the embossments of joined embossed webs (column 4, lines 37-45). Barnholtz also discloses it is preferred to have differing embossments (page 5, lines 15-29; page 11, lines 32-35; page 14, lines 11-22) on the joined webs to provide improved properties (page 8, lines 18-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of embossing and joining webs as shown in Murphy by embossing the second layer with a greater embossing depth than the embossed depth in the first layer as is well known in the art and exemplified by Ruppel and/or Barnholtz in order to provide improved properties in the resulting composite web.

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14. Claims 62, 69, 77, 80-81, 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. (US Patent No. 3,672,950) in view of Nystrand (US Patent No. 3,867,225).

Murphy is applied as discussed above in paragraph 11.

As to claims 62 and 77, Murphy discloses embossing the first layer 9 with a first embossing cylinder 19 and a first pressure roller 18 to form the first set of protuberances and then forming the second set of protuberances on the first layer 9 by embossing through a nip between an embossing roll 30 and a pressure roll 28 and then passing the first and second layers through a nip between the embossing roll 30 and pressure roll 28 and joining the two layers where the third set of protuberances is formed on the second layer 10 between the embossing roll 24 and the pressure roll 28. It is known in the embossing arts, as exemplified by Nystrand, to emboss two layers (15, 23) with identical embossments and join the two layers by passing the first web (23) through a second embossing cylinder (12) and a second pressure roller (27) and passing the second layer (15) through the nip of the second embossing cylinder (12) and a third pressure roller (11) interacting with the second embossing cylinder (12). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of embossing and joining two webs as shown in Murphy with an embossing roll interacting with two pressure rolls as an alternative to the pressure roll interacting with two embossing rolls since these are functionally equivalent alternatives known in the art as exemplified by Nystrand. Only the expected results would be attained by substituting such configuration.

As to claims 69, 80-81, 86 it is well known in the art of bonding embossed paper webs to use a colored adhesive to join the layers together. Nystrand discloses using a colored adhesive in order to provide a decorative, eye-pleasing pattern (column 2, lines 5-21). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of joining two webs as shown in Murphy by using a colored adhesive in order to provide a decorative pattern as shown by Nystrand.

15. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy et al. (US Patent No. 3,672,950) in view of Small (US Patent No. 3,694,300) and/or Barnholtz (WO 97/44528).

Murphy is cited as discussed above for claim 50 in paragraph 11 above. In addition to the limitations recited in claim 50, claim 88 further recites that the second set of proturbances are provided on the first layer before the first layer is joined to the second layer. Murphy discloses simultaneously embossing the first layer (9) and joining the first layer (9) and second layer (10) simultaneously between the impression roll (28) and pattern roll (30). However, it is well known in the embossing arts to separate out the embossing step and the joining steps in order to form a more defined embossment in the web. For example, Small discloses embossing two web layers and joining by separately embossing each layer and then marrying the layers between a separate nip formed by an embossing roll (12) and a laminator roll (27) (column 2, lines 1-33). Barnholtz discloses another example where two layers are embossed and then joined between the nip of an embossing roll (250) and a separate marrying roll (280) (page 14, line 23 to page 15, line 9). It would have been obvious to one of ordinary skill in the art

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at the time of the invention to form the embossed sheet material as shown in Murphy by separately embossing the first layer (9) and then joining with the second layer (10) in order to better define the embossments in the layer and provide a stronger bond as is known in the art and further exemplified by Small and/or Barnholz.

***Allowable Subject Matter***

16. Claims 92, 93, 95-98 are allowed.

17. Claims 55, 56 (based on 55), 58 (based on 55), 59-61, 72 (based on 55), are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

18. Claims 68, 82, 94, 99, 100 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

19. The following is a statement of reasons for the indication of allowable subject matter:

The above claims are allowable for the same reasons as previously recited in paragraphs 21-23 of the prior Office Action, paper number 10.

***Response to Arguments***

20. Applicant's arguments filed May 6, 2003 have been fully considered but they are not persuasive.

Applicant argues on page 21 that the web 10 is not embossed between "plate" roll and impression roll 28 that instead the protrusions generated between rolls 12 and

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13 are flattened again and on page 22 that web 9 is not embossed between "plate" roll 30 and impression roll 28 that instead the web is also flattened. The web 10 is embossed between pattern roll 24 and impression roll 28 and web 9 is embossed between pattern roll 30 and impression roll 28. Specifically, it is noted that the pattern rolls 24 and 30 have patterned impression mats 27 and 31 respectively on their outer surfaces. The patterned impression mats contain raised surfaces that emboss the webs 9 and 10 when the webs pass through the nip between the pattern rolls and the impression roll 28. In particular it is noted that the raised surfaces on the pattern rolls are of a greater height than the raised surfaces of the embossing rolls 12 and 19 which Murphy explicitly recites and Applicant concedes as being embossing rolls. Therefore the webs are embossed when passed between pattern rolls 24 and 30 and the impression roll 28.

Applicant argues on page 22 that Murphy does not disclose the second protrusions higher than the first and that the protrusions are from the same side of the web 10. As discussed above, due to Applicant's amendments, the rejection is now based on web 9 as the first web. Web 9 is first embossed between embossing rolls 19 and 18 where 19 has projections that form proturbances in web 9. Then the web 9 is embossed between roll 30 and roll 28 where roll 30 has a raised patterned impression mat 31 that forms proturbances in web 9 from the same surface as roll 19, therefore the first and second sets of proturbances protrude from a common face of said first layer. As to the second set of proturbances being higher than the first set of proturbances, Murphy discloses the projections on roll 19 has a height of 0.030 inch (column 7, line 5)

while the raised patterned impressions on mat 31 on the roll 30 corresponds to the surfaces of mat 27 on roll 24 (column 6, lines 13-15; column 7, lines 33-34) which have a height of 0.045 inch (column 7, lines 20-21), thus the second set of proturbances are higher than the first set.

### ***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

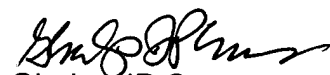
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (703) 305-1271. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Gladys JP Corcoran  
July 13, 2003

  
JEFF H. AFTERGUT  
PRIMARY EXAMINER  
GROUP 1300